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*Dunn, D.F.; Mathew, N.E.;*

 Image Processing, 1997. Proceedings., International Conference on , Volume: 1 , 26-29 Oct. 1997  
 Pages:787 - 790 vol.1

[\[Abstract\]](#)    [\[PDF Full-Text \(412 KB\)\]](#)    **IEEE CNF**

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Display Research Conference, 1988., Conference Record of the 1988 International, 4-6 Oct. 1988

Pages:161 - 164

[\[Abstract\]](#)    [\[PDF Full-Text \(248 KB\)\]](#)    **IEEE CNF**
**2 Digital color halftoning with generalized error diffusion and multichannel green-noise masks***Lau, D.L.; Arce, G.R.; Gallagher, N.C.;*

Image Processing, IEEE Transactions on, Volume: 9, Issue: 5, May 2000

Pages:923 - 935

[\[Abstract\]](#)    [\[PDF Full-Text \(2712 KB\)\]](#)    **IEEE JNL**
**3 Hybrid pixel-based data hiding and block-based watermarking for encrypted diffused halftone images***Soo-Chang Pei; Jing-Ming Guo;*

Circuits and Systems for Video Technology, IEEE Transactions on, Volume: 13, Issue: 8, Aug. 2003

Pages:867 - 884

[\[Abstract\]](#)    [\[PDF Full-Text \(4602 KB\)\]](#)    **IEEE JNL**
**4 Automatic registration of color separation films***Medioni, G.; Wilson, M.; Huertas, A.;*

Robotics and Automation, 1990. Proceedings., 1990 IEEE International Conference on, 13-18 May 1990

Pages:1495 - 1502 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(696 KB\)\]](#) IEEE CNF

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**5 Color error-diffusion halftoning**

Dantera-Venkata, N.; Evans, B.L.; Monga, V.;  
Signal Processing Magazine, IEEE , Volume: 20 , Issue: 4 , July 2003  
Pages:51 - 58

[\[Abstract\]](#) [\[PDF Full-Text \(2843 KB\)\]](#) IEEE JNL

---

**6 On spatial quantization of color images**

Puzicha, J.; Held, M.; Ketterer, J.; Buhmann, J.M.; Fellner, D.W.;  
Image Processing, IEEE Transactions on , Volume: 9 , Issue: 4 , April 2000  
Pages:666 - 682

[\[Abstract\]](#) [\[PDF Full-Text \(1548 KB\)\]](#) IEEE JNL

---

**7 Model-based digital halftoning**

Pappas, T.N.; Allebach, J.P.; Neuhoff, D.L.;  
Signal Processing Magazine, IEEE , Volume: 20 , Issue: 4 , July 2003  
Pages:14 - 27

[\[Abstract\]](#) [\[PDF Full-Text \(2122 KB\)\]](#) IEEE JNL

---

**8 A new moire smoothing method for color inverse halftoning**

Youngmee Han; Jongmin Kim; Minhwan Kim;  
Image Processing. 2002. Proceedings. 2002 International Conference on , Vol  
1 , 22-25 Sept. 2002  
Pages:I-820 - I-823 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(353 KB\)\]](#) IEEE CNF

---

**9 Fast and accurate binary halftone image resolution increasing by decision-tree learning**

Hae Yong Kim;  
Image Processing, 2001. Proceedings. 2001 International Conference on , Vol  
2 , 7-10 Oct. 2001  
Pages:1093 - 1096 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(512 KB\)\]](#) IEEE CNF

---

**10 QR-RLS algorithm for error diffusion of color images**

Bozkurt, G.; Yardimci, Y.; Ankan, O.; Cetin, E.;  
Image Processing, 1998. ICIP 98. Proceedings. 1998 International Conference  
on , Volume: 2 , 4-7 Oct. 1998  
Pages:49 - 53 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(708 KB\)\]](#) IEEE CNF

---

**11 A wide-viewing-angle 10-inch-diagonal full-colour active-matrix LC using a halftone-grayscale method**

Sunata, T.; Inada, T.; Nakagawa, T.; Matsushita, Y.; Ugai, Y.; Aoki, S.;  
Display Research Conference, 1991., Conference Record of the 1991

International , 15-17 Oct. 1991

Pages:255 - 257

[\[Abstract\]](#)   [\[PDF Full-Text \(160 KB\)\]](#)   **IEEE CNF**

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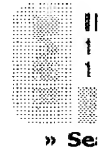
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**1 Green-noise digital halftoning**
*Lau, D.L.; Arce, G.R.; Gallagher, N.C.;*

Proceedings of the IEEE , Volume: 86 , Issue: 12 , Dec. 1998

Pages:2424 - 2444

[\[Abstract\]](#)    [\[PDF Full-Text \(1756 KB\)\]](#)    **IEEE JNL**
**2 Blue and green noise halftoning models**
*Lau, D.L.; Ulichney, R.; Arce, G.R.;*

Signal Processing Magazine, IEEE , Volume: 20 , Issue: 4 , July 2003

Pages:28 - 38

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## 1 Retrieval of gray images from digital halftones

*Fan, Z.;*

Circuits and Systems, 1992. ISCAS '92. Proceedings., 1992 IEEE International Symposium on , Volume: 5 , 3-6 May 1992

Pages:2477 - 2480 vol.5

[\[Abstract\]](#)   [\[PDF Full-Text \(420 KB\)\]](#)   IEEE CNF

## 2 Using vector quantization for image processing

*Cosman, P.C.; Oehler, K.L.; Riskin, E.A.; Gray, R.M.;*

Proceedings of the IEEE , Volume: 81 , Issue: 9 , Sept. 1993

Pages:1326 - 1341

[\[Abstract\]](#)   [\[PDF Full-Text \(1892 KB\)\]](#)   IEEE JNL

## 3 Digital image halftoning by noise thresholding

*Makur, A.; Raghuveer, M.R.;*

Acoustics, Speech, and Signal Processing, 1995. ICASSP-95., 1995 International Conference on , Volume: 4 , 9-12 May 1995

Pages:2535 - 2538 vol.4

[\[Abstract\]](#)   [\[PDF Full-Text \(492 KB\)\]](#)   IEEE CNF

## 4 Adaptive threshold modulation for error diffusion halftoning

*Damera-Venkata, N.; Evans, B.L.;*

Image Processing, IEEE Transactions on , Volume: 10 , Issue: 1 , Jan. 2001

Pages:104 - 116

[\[Abstract\]](#)   [\[PDF Full-Text \(1740 KB\)\]](#)   IEEE JNL

**5 Edge enhancement in clustered-dot dithering***Vander Kam, R.A.; Ping Wah Wong;*

Image Processing, 1996. Proceedings., International Conference on , Volume: 1 , 16-19 Sept. 1996

Pages:857 - 860 vol.1

[\[Abstract\]](#)   [\[PDF Full-Text \(424 KB\)\]](#)   IEEE CNF**6 Tone-dependent error diffusion***Pingshan Li; Allebach, J.P.;*

Image Processing, IEEE Transactions on , Volume: 13 , Issue: 2 , Feb. 2004

Pages:201 - 215

[\[Abstract\]](#)   [\[PDF Full-Text \(1344 KB\)\]](#)   IEEE JNL**7 Modeling and quality assessment of halftoning by error diffusion***Kite, T.D.; Evans, B.L.; Bovik, A.C.;*

Image Processing, IEEE Transactions on , Volume: 9 , Issue: 5 , May 2000

Pages:909 - 922

[\[Abstract\]](#)   [\[PDF Full-Text \(2076 KB\)\]](#)   IEEE JNL**8 Inverse halftoning using binary permutation filters***Yeong-Taeg Kim; Arce, G.R.; Grabowski, N.;*

Image Processing, IEEE Transactions on , Volume: 4 , Issue: 9 , Sept. 1995

Pages:1296 - 1311

[\[Abstract\]](#)   [\[PDF Full-Text \(3140 KB\)\]](#)   IEEE JNL**9 Automatic registration of color separation films***Medioni, G.; Wilson, M.; Huertas, A.;*

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Pages:1495 - 1502 vol.3

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